SCANNED

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
TIDEWATER REGIONAL OFFICE
5636 Southern Boulevard, Virginia Beach, Virginia 23462
(757) 518-2000 Fax (757) 518-2009
www.deq.virginia.gov

Doug Domenech
Secretary of Natural Resources

David K. Paylor
Director

Maria R. Nold
Regional Director

August 29, 2013

Mr. Charles D. Holley
Vice President – F&H System Operations
Virginia Electric and Power Company
Dominion - Southampton Power Station
5000 Dominion Boulevard
Glen Allen, Virginia 23060

Location: Southampton County
Registration No.: 61093
AFS Id. No.: 51-175-00051

Dear Mr. Holley:

Attached is a permit to operate the Southampton Power Station pursuant to 9 VAC 5 Chapter 80 of the Virginia Regulations for the Control and Abatement of Air Pollution. This permit replaces the previous permit dated January 1, 2011.

The permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and civil penalty. Please read all permit conditions carefully.

In evaluating the application and arriving at a final decision to issue this permit, the Department deemed the application complete on July 2, 2013 and solicited written public comments by placing a newspaper advertisement in the Tidewater News newspaper on Sunday, July 14, 2013. The thirty day comment period (provided for in 9 VAC 5-80-270) expired on Tuesday, August 13, 2013 with no comments having been received in this office.

This approval to operate does not relieve Virginia Electric and Power Company of the responsibility to comply with all other local, state, and federal permit regulations.

Issuance of this permit is a case decision. The Regulations, at 9 VAC 5-170-200, provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this permit is mailed or delivered to you. Please consult that and other relevant provisions for additional requirements for such requests.

Additionally, as provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal to court by filing a Notice of Appeal with:

David K. Paylor, Director
Department of Environmental Quality
PO Box 1105
Richmond, VA 23218-1105

In the event that you receive this permit by mail, three days are added to the period in which to file an appeal. Please refer to Rule 2A of the Rules of the Supreme Court of Virginia for additional information including filing dates and the required content of the Notice of Appeal.

If you have any questions concerning this permit, please contact Kelly R. Giles by phone at (757) 518-2155 or by e-mail at Kelly.Giles@deq.virginia.gov.

Sincerely,

Troy D. Breathwaite
Regional Air Permits Manager

TDB/KRG/61093_015_13_VA Power_SouthamptonPS_T5sigamdmod_cvrltr.docx

Attachment: Permit

cc: Manager, Data Analysis (electronic file submission)
Manager/Inspector, Air Compliance
Chief, Air Enforcement Branch (3AP13), U.S. EPA, Region III (electronic file submission)

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
TIDEWATER REGIONAL OFFICE
5636 Southern Boulevard, Virginia Beach, Virginia 23462
(757) 518-2000 Fax (757) 518-2009
www.deq.virginia.gov

Doug Domenech
Secretary of Natural Resources

David K. Paylor
Director

Maria R. Nold
Regional Director

Federal Operating Permit
Article 3

This permit is based upon Federal Clean Air Act acid rain permitting requirements of Title IV, federal operating permit requirements of Title V; and Chapter 80, Article 3 and Chapter 140 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13,: 10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, 9 VAC 5-80-360 through 9 VAC 5-80-700, and 9 VAC 5-140-1010 through 9 VAC 5-140-3880 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	Virginia Electric and Power Company
Facility Name:	Southampton Power Station
Facility Location:	30134 General Thomas Highway Franklin, Virginia 23851

Registration Number:	**61093**
Permit Number:	TRO-61093

This permit includes the following programs:
Federally Enforceable Requirements - Clean Air Act (Sections I through IX)
Federally Enforceable Requirements - Title IV Acid Rain (Section X)
Federally Enforceable Requirements - CAIR Requirements (Section XI)
State Only Enforceable Requirements (Section XII)

The permit application submitted for this source including the attached NO_x compliance plan and NO_x Averaging Plan has been attached to this document.

The Phase II Acid Rain Permit is attached to this document. (Attachment A)

The Clean Air Interstate Rule (CAIR) Permit, Application and Conditions are attached to this document. (Attachment B)

January 1, 2011
Effective Date

December 31, 2015
Expiration Date

August 29, 2013
Significant Modification Date

Maria R. Nold, Regional Director

August 29, 2013
Signature Date

Table of Contents, 2 pages.
Permit Conditions, pages 5-38.

Attachments:
Phase II Acid Rain Permit - Attachment A
Clean Air Interstate Rule (CAIR) Permit – Attachment B
Source Testing Report Format – Attachment C

Table of Contents

I. Facility Information

Permittee
Virginia Electric and Power Company
5000 Dominion Boulevard
Glen Allen, Virginia 23060

Responsible Official
David Faison
Station Director
Southampton Power Station
(804) 273-3293

Acid Rain/CAIR Designated Representative
Edward Baine
Vice President, Fossil & Hydro
USEPA ATS-AAR ID number: 606670

Facility
Southampton Power Station
30134 General Thomas Highway
Franklin, Virginia 23851

Contact Person
Cathy C. Taylor
Director
(804) 273-2929

County-Plant Identification Number: 51-175-00051
ORIS Code and/or EIA Facility ID: 10774

NATS Facility Identification Number: 10774000001 and 10774000002

Facility Description: NAICS Number 221117 - The Southampton Power Station (SPS) is an electric generating facility that produces electricity for Dominion. The Station includes two biomass-fired stoker boilers, each with a maximum rated capacity of 394 MMBtu/hr, with associated fuel, lime, and ash handling systems, as well as several small diesel engine sources used to provide redundant or backup capability. No. 2 fuel oil is used for startup of the biomass boilers. One oil-fired auxiliary boiler is located at SPS to provide steam to the host during times when the Station is not generating electricity.

II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity *	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
Fuel Burning Equipment / Utility Units							
001	001	Primary Biomass Boiler to generate steam for process use and electricity. (No. 2 fuel oil for start-up only) (2012)	394 MMBTU/hour	SNCR Dry Lime Scrubber Fabric Filter Baghouse	EC-1a EC-1b EC-1c	NO_x SO_2 PM/PM-10/PM-2.5 Metals	05/23/12 PSD
002	001	Primary Biomass Boiler to generate steam for process use and electricity. (No. 2 fuel oil for start-up only) (2012)	394 MMBTU/hour	SNCR Dry Lime Scrubber Fabric Filter Baghouse	EC-2a EC-2b EC-2c	NO_x SO_2 PM/PM-10/PM-2.5 Metals	05/23/12 PSD
004	004	Auxiliary Boiler to produce steam for process use (combusts No. 2 fuel oil)	81.58 MMBTU/hour (nominal)	Low NO_x Burners	EC-4	NO_x	05/23/12 PSD
006	006	Emergency Auxiliary Diesel Generator	1.4 MMBTU/hour 410 kW (nominal)	N/A	N/A	N/A	05/23/12 PSD
007	007	Emergency Diesel Feedwater Pump	1.23 MMBTU/hour 126 BHP (nominal)	N/A	N/A	N/A	05/23/12 PSD
008	008	Diesel Firewater Pump Engine	0.68 MMBTU/hour 208 BHP (nominal)	N/A	N/A	N/A	05/23/12 PSD
009	009	Portable Diesel Air Compressor Engine	0.49 MMBTU/hr 80 BHP (nominal)	N/A	N/A	N/A	05/23/12 PSD

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity *	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
Biomass, Ash, and Lime Handling							
010	010	Biomass Storage Silo	180 tons	Bin Vent Filter	EC-10	PM/PM-10/PM-2.5	05/23/12 PSD
011 012 013	011 012 013	Boiler Ash Conveyor Blower Systems (A, B. and C)	28 tons/hr each	Fabric Filter Baghouse	EC-11 EC-12 EC-13	PM/PM-10/PM-2.5	05/23/12 PSD
014	014	Recycle Ash Storage	26.5 tons/hr	Bin Vent Filter			
015	015	Ash Storage Silo	530 tons	Bin Vent Filter	EC-15	PM/PM-10/PM-2.5	05/23/12 PSD
016	FUGITIVE	Ash Unloading Feeder	80 tons/hr	Ash Conditioning System - water spray	EC-16	PM/PM-10/PM-2.5	05/23/12 PSD
017	017	Pebble Lime Storage Silo	135 tons	Bin Vent Filter	EC-17	PM/PM-10/PM-2.5	05/23/12 PSD
101A 101B	FUGITIVE	Biomass Truck Tippers (2) to Receiving Hoppers (2)	269 tons/hr	Partial Enclosure	N/A	PM/PM-10/PM-2.5	05/23/12 PSD
101C	FUGITIVE	Emergency Reclaimer	90 tons/hr	Partial Enclosure	N/A	PM/PM-10/PM-2.5	05/23/12 PSD
102	FUGITIVE	Biomass Storage Pile	3×10^6 ft^3	N/A	N/A	PM/PM-10/PM-2.5	05/23/12 PSD
103	FUGITIVE	Biomass Stacker	269 tons/hr	N/A	N/A	PM/PM-10/PM-2.5	05/23/12 PSD
104-1 104-2	FUGITIVE	Truck Tipper Reclaimer (#1 and #2) to Conveyor A Transfer Point	269 tons/hr	Partial Enclosure	N/A	PM/PM-10/PM-2.5	05/23/12 PSD
104-3	FUGITIVE	Conveyor B to Diverter Gate #2 Transfer Point	269 tons/hr	Partial Enclosure	N/A	PM/PM-10/PM-2.5	05/23/12 PSD
104-4	FUGITIVE	Conveyor C to Stacker Transfer Point	269 tons/hr	Partial Enclosure	N/A	PM/PM-10/PM-2.5	05/23/12 PSD
104-5	FUGITIVE	Reclaimer to Conveyor D Transfer Point	269 tons/hr	Partial Enclosure	N/A	PM/PM-10/PM-2.5	05/23/12 PSD
104-6	FUGITIVE	Emergency Reclaimer to Conveyor D Transfer Point	269 tons/hr	Partial Enclosure	N/A	PM/PM-10/PM-2.5	05/23/12 PSD

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity *	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
Biomass, Ash, and Lime Handling (Cont'd)							
104-7	FUGITIVE	Diverter Gate #2 to Conveyor D Transfer Point	269 tons/hr	Partial Enclosure	N/A	PM/PM-10/PM-2.5	05/23/12 PSD
104-8	FUGITIVE	Conveyor D to Conveyor E Transfer Point	269 tons/hr	Partial Enclosure	N/A	PM/PM-10/PM-2.5	05/23/12 PSD
104-9	FUGITIVE	Conveyor E to Fuel Bunker Drag Chain Transfer Point	269 tons/hr	Partial Enclosure	N/A	PM/PM-10/PM-2.5	05/23/12 PSD

*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

III. Boiler Requirements – (001, 002 and 004)

A. Limitations - All Boilers (001, 002 and 004)

1. **Fuel - All Boilers** - The approved fuels are listed in the table below. A change in the fuel may require a permit to modify and operate.

Reference No.	Equipment Description	Fuel Type(s)
001	Primary Boiler #1	Biomass Distillate Oil (Start-up Only)
002	Primary Boiler #2	Biomass Distillate Oil (Start-up Only)
004	Auxiliary Boiler	Distillate Oil

(9 VAC 5-80-490 and Condition 25 of 05/23/12 PSD permit)

2. **Fuel Throughput - All Boilers** - The facility-wide throughput limit of distillate oil is as listed in the table below.

Fuel Type	Limit
Distillate Oil	5,879,518 gallons/yr

These annual limits are calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-490 B & C and Condition 28 of 05/23/12 PSD permit)

3. **Fuel Specification Distillate Oil - All Boilers** - The distillate oil shall meet the specifications below:

Reference No.	Equipment Description	Fuel	Maximum % Sulfur (by weight, per shipment)	Average % Sulfur	ASTM Method
001 002	Primary Boiler #1 Primary Boiler #2	Distillate Oil	0.3	0.2	D396 (for numbers 1 or 2 fuel oil)
004	Auxiliary Boiler	Distillate Oil	0.3	0.2	D396 (for numbers 1 or 2 fuel oil)

(9 VAC 5-80-490 B & C, 9 VAC 5-80-1180, 9 VAC 5-50-260, 40 CFR 60.45b and Condition 32 of 05/23/12 PSD permit)

4. **Fuel Certification** - The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil. Each fuel supplier certification shall include the following:

   a. The name of the fuel supplier;

   b. The date on which the distillate oil was received;

   c. The quantity of distillate oil delivered in the shipment;

   d. A statement that the distillate oil complies with the American Society for Testing and Materials specifications (ASTM D396) for numbers 1 or 2 fuel oil; and

   e. The sulfur content of the distillate oil or a statement that the sulfur content of the distillate oil is less than or equal to 0.3 percent by weight per shipment.

   Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by DEQ may be used to determine compliance with the fuel specifications stipulated in Condition III.A.3. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits.

   (9 VAC 5-80-490, 9 VAC 5-50-410 and Condition 33 of 05/23/12 PSD permit)

5. **Boiler Operation - All Boilers** - The auxiliary boiler (004) and the primary biomass boilers (001 and 002) shall not operate concurrently, except during start-up and shutdown, and for no more than 12 hours over any consecutive 24-hour period and unless both primary biomass boilers (001 and 002) are operating at fifty (50) percent capacity or less.
   (9 VAC 5-80-490 B & C, 9 VAC 5-80-1180 and Condition 31 of 05/23/12 PSD permit)

6. **Process Emission Limits - All Boilers** - Combined emissions from the operation of the primary biomass boilers (001 and 002) and auxiliary boiler (004) shall not exceed the limits specified below:

Pollutant	Tons/yr
$PM_{2.5}$ – total	98.0
PM_{10} – total	102.9
PM – total	115.3
Sulfur Dioxide	42.7
Nitrogen Oxide (as NO_2)**	413.9
Carbon Monoxide***	917.7
Volatile Organic Compounds***	43.0

** - Lower limits may be imposed by the DEQ after review of in-stack testing and optimizing the SNCR.
*** - Lower limits may be imposed by the DEQ after review of in-stack testing.

   These limitations are based on the combined primary biomass boilers (001 and 002) operations as described in Condition III.C.5 and the auxiliary boiler (004) operating 360 hours per year. These emissions are derived from the estimated overall emission contribution from operating limits, process requirements and/or calculations. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits.
   (9 VAC 5-80-490 B & C, 9 VAC 5-80-1180, 9 VAC 5-50-280, 9 VAC 5-50-260, 40 CFR 60.42c(e) and Condition 37 of 05/23/12 PSD permit)

7. **Visible Emission Limit - All Boilers** - Visible emissions from the primary boiler stacks (001 and 002) and auxiliary boiler stack (004) shall not exceed ten (10) percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed twenty (20) percent opacity.
   (9 VAC 5-80-490, 9 VAC 5-80-1180, 40 CFR 60.43b, 40 CFR 60.43c(c) and (d), 40 CFR 64.3 and 64.4 and Condition 41 of 05/23/12 PSD permit)

B. Limitations - Auxiliary Boiler (004)

1. **Emission Controls - Auxiliary Boiler** - Particulate matter emissions from the auxiliary boiler (004) shall be controlled by combustion efficiency.
(9 VAC 5-80-490 and Condition 5 of 05/23/12 PSD permit)

2. **Process Emission Limits - Auxiliary Boiler** - Emissions from the operation of the auxiliary boiler (004) shall not exceed the limits specified below:

Pollutant	Lbs/mmBtu	Lbs/hr
PM-10	0.03	2.4
PM-total	0.04	3.3
Sulfur Dioxide	0.31	25.3
Nitrogen Oxide (as NO_2)	0.1	8.2
Carbon Monoxide	0.082	6.7
Volatile Organic Compounds	0.041	3.3

These emissions are derived from the estimated overall emission contribution from operating limits, process requirements and/or calculations. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits.
(9 VAC 5-80-490 B & C, 9 VAC 5-50-280, 9 VAC 5-80-1180, 9 VAC 5-50-260, 40 CFR 60.42c(e) and Condition 36 of 05/23/12 PSD permit)

3. **Boiler Stack Height - Auxiliary Boiler** – The auxiliary boiler (004) stack height shall be 200 feet or greater.
(9 VAC 5-80-490 and Condition 24 of 05/23/12 PSD permit)

4. **40 CFR 63 Subpart DDDDD** – The existing, industrial, light liquid (distillate oil) fired boiler (004) shall be in compliance with 40 CFR 63, Subpart DDDDD as follows:

   a. Compliance with 40 CFR 63, Subpart DDDDD shall be achieved by the date specified in 40 CFR 63.7495;

   b. Submit applicable notifications specified in §63.7495(d), §63.7545 and in Subpart A of 40 CFR Part 63;

   c. The permittee shall comply with the applicable emission limits (Table 2), work practice standards (Table 3) and operating limits (Table 4) of this subpart. These standards apply at all times the unit is operating except during periods of startup and shutdown, during which time the unit must comply only with Table 3 (63.7500);

   d. The permittee shall comply with the applicable general compliance requirements according to §63.7505;

   e. The permittee shall comply with the applicable testing, fuel analyses and initial compliance requirements according to §63.7510;

   f. The permittee shall conduct subsequent performance tests, fuel analyses or tune-ups as specified in §63.7515;

   g. The permittee shall conduct all performance tests as specified in §63.7520;

   h. The permittee shall perform all fuel analyses and fuel specifications as specified in §63.7521;

   i. The permittee shall monitor, install, operate and maintain the equipment according to §63.7525;

   j. The permittee shall demonstrate initial compliance with emission limitations, fuel specifications and work practice standards according to §63.7530;

   k. The permittee shall monitor and collect data according to §63.7535 and, if applicable, the site-specific monitoring plan required by §63.7505(d);

l. The permittee shall demonstrate continuing compliance with the emission limitations, fuel specifications and work practice standards according to §63.7540; and

m. The permittee shall submit applicable reports according to §63.7550 and maintain reports as specified in §63.7560.

(9 VAC 5-80-490 and 40 CFR 63 Subpart DDDDD)

5. **Requirements - Auxiliary Boiler** – The auxiliary boiler (004) shall be operated in accordance with 40 CFR 60 Subparts A and Dc and 40 CFR 63 Subparts A and DDDDD.
(9 VAC 5-80-110, 40 CFR 60 Subparts A and Dc, and 40 CFR 63 Subparts A and DDDDD)

C. Limitations - Primary Boilers (001 and 002)

1. **Fuel Specification Biomass - Primary Boilers** - The biomass shall meet the specifications below:

Biomass means those residuals that are akin to traditional cellulosic biomass including forest-derived biomass (e.g. green wood, forest thinning, clean and unadulterated bark, sawdust, trim, and tree harvesting residuals from logging and sawmill materials), wood collected from forest fire clearance activities, trees and clean wood found in disaster debris, and clean biomass from land clearing operations, each as specified in the definition of Clean Cellulosic Biomass in 40 CFR 241.2, excluding any wood which contains chemical treatments or has affixed thereto paint and/or finishing materials or paper or plastic laminates. Approved biomass is biomass that does not contain contaminants at concentrations not normally associated with virgin biomass materials.

(9 VAC 5-80-490 and Condition 26 of 05/23/12 PSD permit)

2. **Fuel Quality Data – Primary Boilers** - The permittee shall obtain the following fuel quality data on the biomass for the primary biomass boilers (001 and 002):

a. An analysis of the biomass heat content as-fired at least once per calendar week;

b. An ultimate analysis of the biomass as-fired at least once per calendar quarter;

c. An analysis of the biomass fluoride content as-fired at least once per calendar quarter; and

d. The permittee shall submit a fuel shipment certification plan at least 60 days prior to facility startup for approval by the Tidewater Regional Office. Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by DEQ may be used to determine compliance with the fuel specifications stipulated in this permit.

Details of the sampling procedures shall be arranged with the Tidewater Regional Office. These records shall be available on site for inspection by the Department personnel and shall be kept current for the most recent five year period.

(9 VAC 5-80-490 and Condition 27 of 05/23/12 PSD permit)

3. **Firing Rate Limits – Primary Boilers** – The firing rates for the primary biomass boilers (001 and 002) are as listed in the table below.

Firing Rate	Limit
Each Primary Boiler Maximum	394 MMBtu/hr
Primary Boilers, Combined Total	6,109,480 MMBtu/yr

The annual limit is calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-490 and Condition 29 of 05/23/12 PSD permit)

4. **Operating Hours Limits – Primary Boilers** – Hourly operating limits for the boilers are listed in the table below:

Reference No.	Equipment Description	Limit (hr/yr)
001	Primary Boiler #1	8,400
002	Primary Boiler #2	8,400

These annual limits are calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-490 B & C and Condition 30 of 05/23/12 PSD permit)

5. **Process Emission Limits - Primary Boilers** - Emissions from the operation of each of the primary biomass boilers (001 and 002) shall not exceed the limits specified below:

Pollutant	Lbs/MMBtu	Lbs/hr	Tons/yr
$PM_{2.5}$ – total	----------	11.67	49.01
PM_{10} – filterable	0.017	6.7	----------
PM_{10} – total	----------	12.20	51.25
PM – filterable	0.019	7.5	----------
PM – total	----------	13.65	57.33
Sulfur Dioxide	0.0125*	4.9	19.1
Nitrogen Oxide (as NO_2) **	0.135*	53.2	206.2
Carbon Monoxide ***	0.30*	118.2	458.2
Volatile Organic Compounds ***	----------	5.05	21.21
Fluorides (as HF)	----------	0.4	1.70
Sulfuric Acid Mist	----------	0.96	4.05

* - Compliance determined on a 30-day rolling average.
** - Lower limits may be imposed by the DEQ after review of in-stack testing and optimizing the SNCR.
*** - Lower limits may be imposed by the DEQ after review of in-stack testing.

These emissions are derived from the estimated overall emission contribution from operating limits, process requirements and/or calculations. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits.
(9 VAC 5-80-490 B & C, 40 CFR 60.42b, 60.43b, 60.44b and Condition 35 of 05/23/12 PSD permit)

6. **Emission Controls - Primary Boilers** – Particulate matter emissions from the primary biomass boilers (001 and 002) shall be controlled by an in-line multiple cyclone, a lime water injection spray dryer and a fabric filter rated at 99.9 percent control efficiency. The control systems shall be provided with adequate access for inspection and shall be in operation when the primary biomass boilers are operating. The fabric filter may be bypassed during non-biomass fuel boiler start-ups to alleviate potential moisture damage to the baghouse at low start-up temperatures. Bypass of the fabric filter shall not exceed 12 hours per start-up.
(9 VAC 5-80-490, 40 CFR 60.43b and Condition 4 of 05/23/12 PSD permit)

7. **Emission Controls - Primary Boilers** – Sulfur dioxide (SO_2) emissions from the primary biomass boilers (001 and 002) shall be controlled by a lime-water injection spray dryer (a dry FGD system). The lime-water spray dryer shall be provided with adequate access for inspection and shall be in operation when the primary biomass boilers are operating.
(9 VAC 5-80-490, 40 CFR 60.42b and Condition 7 of 05/23/12 PSD permit)

8. **Emission Controls - Primary Boilers** – Nitrogen oxide (as NO_2) emissions from the primary biomass boilers (001 and 002) shall be controlled by a selective non-catalytic reduction (SNCR) system, a continuous biomass feed system, staged combustion and low excess air.
(9 VAC 5-80-490 and Condition 8 of 05/23/12 PSD permit)

9. **40 CFR 63 Subpart DDDDD** – The existing, industrial, stoker unit burning wet biomass boilers (001 and 002) shall be in compliance with 40 CFR 63, Subpart DDDDD as follows:

   a. Compliance with 40 CFR 63, Subpart DDDDD shall be achieved by the date specified in 40 CFR 63.7495;

   b. Submit applicable notifications specified in §63.7495(d), §63.7545 and in Subpart A of 40 CFR Part 63;

   c. The permittee shall comply with the applicable emission limits (Table 2), work practice standards (Table 3) and operating limits (Table 4) of this subpart. These standards apply at all times the unit is operating except during periods of startup and shutdown, during which time the unit must comply only with Table 3 (63.7500);

   d. The permittee shall comply with the applicable general compliance requirements according to §63.7505;

   e. The permittee shall comply with the applicable testing, fuel analyses and initial compliance requirements according to §63.7510;

   f. The permittee shall conduct subsequent performance tests, fuel analyses or tune-ups as specified in §63.7515;

   g. The permittee shall conduct all performance tests as specified in §63.7520;

   h. The permittee shall perform all fuel analyses and fuel specifications as specified in §63.7521;

   i. The permittee shall monitor, install, operate and maintain the equipment according to §63.7525;

   j. The permittee shall demonstrate initial compliance with emission limitations, fuel specifications and work practice standards according to §63.7530;

   k. The permittee shall monitor and collect data according to §63.7535 and, if applicable, the site-specific monitoring plan required by §63.7505(d);

   l. The permittee shall demonstrate continuing compliance with the emission limitations, fuel specifications and work practice standards according to §63.7540; and

   m. The permittee shall submit applicable reports according to §63.7550 and maintain reports as specified in §63.7560.

   (9 VAC 5-80-490 and 40 CFR 63 Subpart DDDDD)

10. **Requirements – Primary Boilers** – The primary boilers (001 and 002) shall be operated in accordance with 40 CFR Subparts A and Db and 40 CFR Subparts A and DDDDD.
(9 VAC 5-80-110, 40 CFR 60 Subparts A and Db and 40 CFR 63 Subparts A and DDDDD)

D. Monitoring – All Boilers (001, 002 and 004)

1. **Continuous Emission Monitors (CEMs) – All Boilers** – For the continuous emission monitors for opacity on the primary biomass boilers (001 and 002) and the auxiliary boiler (004), and all other continuous emission

monitors required by this permit, the continuous monitoring and quality assurance data may, at the discretion of the Board, be used as evidence of violation of the emission standards. These monitors are subject to such data capture requirements and/or quality assurance requirements as may be deemed appropriate by the Board (refer to 40 CFR 60.13 and Appendix B).
(9 VAC 5-80-490, 40 CFR 60.13 and Condition 19 of 05/23/12 PSD permit)

2. **Continuous Emission Monitors (CEMs) – All Boilers** – All continuous emission monitoring systems (CEMs) and continuous opacity monitor (COMs) shall be operated in accordance with the applicable procedures under Performance Specification 1, 2, and 3 of 40 CFR 60, Appendix B.
(9 VAC 5-80-490 and 40 CFR 60.13)

E. Monitoring – Auxiliary Boiler (004)

1. **Continuous Emission Monitors (CEMs) - Auxiliary Boiler** – A continuous emission monitor shall be installed to measure and record the opacity emitted from the auxiliary boiler (004). It shall be maintained and calibrated in accordance with approved procedures (reference to 40 CFR 60.13 and 40 CFR 60.47Dc). A 30-day notification prior to the demonstration of continuous monitoring system performance and subsequent notifications are to be submitted to the Director, Tidewater Regional Office.
(9 VAC 5-80-490, 9 VAC 5-50-40 and Condition 17 of 05/23/12 PSD permit)

2. **Emission Calculations - Auxiliary Boiler** - The permittee shall calculate emissions of NO_x, SO_2, PM-10, PM, CO and VOC daily on a 30-day rolling average basis using appropriate pollutant-specific emission factors (F-factors or AP-42), hourly records of boiler heat input and hourly throughput of distillate oil to demonstrate compliance with the emission limitations set forth in Condition III.B.2 of this permit. The permittee shall calculate lb/MMBtu SO_2 emissions in accordance with approved procedures outlined in 40 CFR 60.44c(e).
(9 VAC 5-80-490 B & C and 40 CFR 60.44c(e))

3. **Emissions - Auxiliary Boiler** - Compliance with the lb/MMBtu SO_2 emission limitations set forth in Condition III.B.2 of this permit shall be demonstrated by compliance with the SO_2 emission monitoring procedures outlined in 40 CFR 60.46c(d) or (e). If the permittee elects to follow the compliance procedures of 40 CFR 60.46c(e), the permittee shall obtain fuel supplier certifications as provided in 40 CFR 60.48c(f).
(9 VAC 5-80-490 B & C and 40 CFR 60.46c and 60.48c)

F. Monitoring – Primary Boilers (001 and 002)

1. **Continuous Emission Monitors (CEMs) - Primary Boilers** – Continuous emission monitors shall be installed to measure and record the concentration of opacity, SO_2, NO_x (at each boiler outlet) and CO_2 or O_2 emitted from the primary biomass boilers (001 and 002). The CEMs shall be maintained and calibrated in accordance with approved procedures (reference to 40 CFR 60.13). A 30 day notification prior to the demonstration of continuous monitoring system performance and subsequent notifications are to be submitted to the Director, Tidewater Regional Office.
(9 VAC 5-80-490, 40 CFR 60.13, 40 CFR 60.46b, 40 CFR 60.48b and Condition 16 of 05/23/12 PSD permit)

2. **Continuous Emission Monitors (CEMs) - Primary Boilers** – The continuous monitoring data generated by the SO_2 and NO_x monitors on the primary biomass boilers (001 and 002) shall be used to determine compliance with the emission standards on a 30-day rolling average basis. All of the data capture, quality assurance provisions and reporting requirements of NSPS Subpart Db shall apply.
(9 VAC 5-80-490, 40 CFR 60.13, 40 CFR 60 Subpart Db and Condition 18 of 05/23/12 PSD permit)

3. **Continuous Emission Monitors (CEMs) – Primary Boilers** - A continuous emission monitor meeting the design specifications of 40 CFR Part 60, Appendix B Performance Specification 4A, shall be installed to measure and record the emissions of CO from each primary biomass boiler (001 and 002) as lbs/MMBtu and lbs/hr. The CEMs shall be installed, calibrated, maintained, audited and operated in accordance with DEQ

approved procedures which are equivalent to the requirements of 40 CFR 60.13 and Appendices B and F. Data shall be reduced to 30-day rolling averages per the procedures for NO_x contained in 40 CFR 60 Subpart Db. The monitor shall be used to demonstrate compliance with the 30-day rolling average CO emission standard (lb/MMBtu basis) as noted in Condition III.C.5.
(9 VAC 5-80-490 and Condition 20 of 05/23/12 PSD permit)

4. **Stack Flowmeter – Primary Boilers** - A flowmeter shall be used to measure the stack gas airflow from the common stack with the flow apportioned by steam flow rate for each primary biomass boiler (001 and 002) utilizing the procedures for Part 75 apportionment. The stack gas flowmeter shall be installed, operated, and maintained in accordance with the provisions of 40 CFR 75 Appendices A and B, with the exception that the relative accuracy test audit (RATA) be performed at least once every four (4) consecutive calendar quarters. The permittee shall submit stack gas flowmeter reports as required by 40 CFR 75 Appendices A and B. The CO emissions (lb/hr basis) shall be calculated from data obtained from the CO continuous emissions monitoring system and stack gas flowmeter in accordance with the provisions of 40 CFR 75 Appendix F. These data shall be used to demonstrate compliance with the CO emission standard (lb/hr basis) as noted in Condition III.C.5.
(9 VAC 5-80-490 and Condition 21 of 05/23/12 PSD permit)

5. **Performance Evaluation – Primary Boilers** - Performance evaluations of the CO continuous monitoring systems shall be conducted in accordance with 40 CFR Part 60, Appendix B, and shall take place within 180 days after the initial effective date of the CO 30-day rolling average limit. Two copies of the performance evaluation report shall be submitted to the Director, Tidewater Regional Office within 45 days of the evaluation. The continuous monitoring systems shall be installed and operational prior to conducting initial performance evaluations. Verification of operational status shall, at a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation and calibration of the device. A 30 day notification, prior to the demonstration of continuous monitoring system performance, and subsequent notifications shall be submitted to the Director, Tidewater Regional Office.
(9 VAC 5-80-490 and Condition 22 of 05/23/12 PSD permit)

6. **Compliance Assurance Monitoring (CAM) - Primary Boilers** - The permittee shall monitor, operate, calibrate and maintain the baghouses controlling particulate matter from the primary biomass boilers (001 and 002) according to the following:

Indicator	Indicator 1 Opacity	Indicator 2 Operational Status of Equipment	Indicator 3 Exhaust Temperature
Measurement Approach	Continuous Opacity Monitors (COMs)	Actions taken in the event an opacity excursion is observed: • Initiate a cleaning cycle for each baghouse. • Monitor the opacity as the baghouses (which are dedicated to either Unit 1 or Unit 2) go through a cleaning cycle. The opacity will drop when the compartment with the problem or leaking bag goes off line to clean. • Once the problem compartment is identified, the compartment is isolated and the issue resolved (e.g., replacement of bags).	Monitor exhaust gas temperature between scrubber and baghouse
Indicator Range	Continuous operation between 0% - 10% opacity per hour. Excursion is one six-minute period greater than 10% opacity.	Varies; these are work practices.	Exhaust gas temperature at the baghouse inlet (15 minute average) not to exceed value based on temperatures measured during stack testing that demonstrates compliance.
Performance Criteria: **Data Representativeness**	Location and installation of monitors is per 40 CFR 60, Appendix B, Performance Specification 1 (PS-1).	N/A. COMs satisfy 40 CFR 64.3(b).	Location and installation of temperature monitor at inlet duct to baghouse.
Verification of Operational Status	The monitoring device shall be installed and calibrated according to manufacturer's recommendations prior to the initial performance tests.	Verification procedures for operation in accordance with manufacturer's recommendations, at a minimum.	Verification procedures, including installation, calibration, and operation in accordance with manufacturer's recommendations, at a minimum.
QA/QC Practices and Criteria	COMs was installed and evaluated in accordance with PS-1. Zero and span drift are checked daily and filter audits are performed in accordance with PS-1. Filter audits performed annually.	N/A	Calibrate, maintain, and operate instrumentation using procedures that are based on the manufacturer's specifications, at a minimum.
Monitoring Frequency	Measured continuously.	As needed.	Measured continuously.
Data Collection Procedures	Data collected by computerized data acquisition and handling system (DAHS). The system collects and retains all relevant opacity data.	Events and corrective actions are logged as needed.	Data are collected by computerized data acquisition and handling system connected to the plant distributed control system. The system collects and retains all relevant temperature data.
Averaging Period	Six-minute block averages.	N/A	One minute data values.

7. **Compliance Assurance Monitoring (CAM)** - The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.
(9 VAC 5-80-490 E and 40 CFR 64.6 (c))

8. **Compliance Assurance Monitoring (CAM)** - At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
(9 VAC 5-80-490 E and 40 CFR 64.7 (b))

9. **Compliance Assurance Monitoring (CAM)** - Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the primary biomass boilers (001 and 002) are operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.
(9 VAC 5-80-490 E and 40 CFR 64.7 (c))

10. **Compliance Assurance Monitoring (CAM)** - Upon detecting an excursion or exceedance, the permittee shall restore operation of the primary biomass boilers (001 and 002) (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable.
(9 VAC 5-80-490 E and 40 CFR 64.7 (d)(1))

11. **Compliance Assurance Monitoring (CAM)** - Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
(9 VAC 5-80-490 E and 40 CFR 64.7(d)(2))

12. **Compliance Assurance Monitoring (CAM)** - If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director, Tidewater Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
(9 VAC 5-80-490 E and 40 CFR 64.7(e))

13. **Compliance Assurance Monitoring (CAM)** - If the number of exceedances or excursions exceeds 5 percent duration of the operating time for the primary biomass boilers (001 and 002) for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:

    a. Improved preventative maintenance practices;

    b. Process operation changes;

    c. Appropriate improvements to control methods;

    d. Other steps appropriate to correct control performance; and

    e. More frequent or improved monitoring.

    (9 VAC 5-80-490 E and 40 CFR 64.8(a) and (b))

G. Recordkeeping

1. **On Site Records** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:

    a. Annual hours of operation for each of the primary biomass boilers (001 and 002), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months;

    b. Annual throughput of distillate oil, in gallons, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months;

    c. Records of fabric filter bypass time for non-biomass fuel start-ups of the primary boilers (001 and 002);

    d. Records of distillate oil sulfur content per shipment and annual average sulfur content, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months;

    e. Records of maximum firing rate (each, in MMBtu/hr) and total heat input (combined, in MMBtu/yr) for the primary biomass boilers (001 and 002). Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months;

    f. All reports required by 40 CFR 60 Subpart Db for the primary biomass boilers (001 and 002), including but not limited to:

        (i) Reports of excess emissions in accordance with 40 CFR 60.49b(h); and

        (ii) Reports containing the steam generating unit operating day information recorded in Condition III.G.1.g(ii).

    The reporting period required by 40 CFR 60 Subpart Db is each 6 month period. Reports required by Conditions III.G.1.f(i) and III.G.1.f(ii) may be submitted electronically in accordance with 40 CFR 60.49b(v).

g. Any reports/additional information required to demonstrate compliance with 40 CFR 60 Subpart Db for the primary biomass boilers (001 and 002), including but not limited to:

(i) Records of opacity in accordance with 40 CFR 60.49b(f); and

(ii) Records required by 40 CFR 60.49b(g) for each steam generating unit operating day.

h. Daily hours of concurrent operation of the primary biomass boilers (001 and 002) and auxiliary boiler (004) (identifying concurrent hours of operation that occur due to startup or shutdown). Compliance for each consecutive 24-hour period shall be documented on a monthly basis;

i. Records of boiler load for each of the primary boilers (001and 002) during any hours of concurrent operation with the auxiliary boiler (004);

j. All fuel quality data in accordance with Condition III.C.2;

k. All fuel oil supplier certifications in accordance with Condition III.A.4;

l. All CEMs data for opacity, CO, SO_2, NO_x and CO_2 or O_2 for the primary biomass boilers (001 and 002);

m. All emission calculations demonstrating compliance with the emission limitations set forth in Conditions III.A.6, III.B.2 and III.C.5. Such records shall include, but are not limited to all pollutant-specific emission factors, throughputs and assumptions used in the calculations. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months;

n. All stack test results demonstrating compliance with the lb/MMBtu limitations specified in Condition III.C.5;

o. All COMs data for opacity for the auxiliary boiler (004); and

p. Scheduled and unscheduled maintenance and operator training.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years. (9 VAC 5-80-490 B & C, 9 VAC 5-60-50, 9 VAC 5-80-1180, 9 VAC 5-50-50 and Condition 45 of 05/23/12 PSD permit)

2. **Compliance Assurance Monitoring (CAM) Recordkeeping** - The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan (QIP) required pursuant to §64.8 and any activities undertaken to implement a quality improvement plan (QIP), and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). (9 VAC 5-80-490 E and 40 CFR 64.9(b))

H. Testing

1. **Stack Test** - Initial performance tests shall be conducted for SO_2, NO_x, CO, VOC, Sulfuric Acid Mist and Fluorides (HF) from each of the primary biomass boilers (001 and 002) to determine compliance with the emission limits contained in Condition III.C.5. The tests shall be performed and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30, and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with the Director, Tidewater Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. One copy of the test results shall be submitted to the Director, Tidewater Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit. (9 VAC 5-80-490, 40 CFR 60.49b and Condition 46 of 05/23/12 PSD permit)

2. **Stack Test** - For each primary biomass boiler (001 and 002), four performance tests shall be conducted for each of the following pollutants: PM (filterable), PM (total), PM_{10} (filterable), PM_{10} (total), $PM_{2.5}$ (total). Concurrently with each performance test the fuel analyses in accordance with Condition III.C.2 shall be obtained. The performance tests shall be conducted to determine compliance with the emission limits contained in Condition III.C.5. The initial performance tests shall be performed, reported, and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. Subsequent performance tests shall be performed, at least 75 but not more than 105 days after the directly preceding test. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410 or 40 CFR 51, Appendix M as applicable. The details of the tests are to be arranged with the Tidewater Regional Office. The permittee shall submit a test protocol at least 30 days prior to the initial performance test. The protocol shall cover all performance tests for the respective pollutant. One copy of the initial performance test results shall be submitted to the Tidewater Regional Office within 180 days of startup or 45 days after completion of the test, whichever is earlier, and shall conform to the test report format enclosed with this permit. One copy of the test results shall be submitted to the Tidewater Regional Office within 45 days after completion of each subsequent performance test and shall conform to the test report format enclosed with this permit.
(9 VAC 5-80-490, 40 CFR 60.46b, 40 CFR 60.49b and Condition 47 of 05/23/12 PSD permit)

3. **Visible Emission Evaluation** - Concurrently with the initial performance tests required by Condition III.H.2, Visible Emission Evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall also be conducted on the primary biomass boilers (001 and 002). Each test shall consist of 30 sets of 24 consecutive observations (at 15 second intervals) to yield a six minute average. The details of the tests are to be arranged with the Director, Tidewater Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. The evaluation shall be performed, and reported and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. Should conditions prevent concurrent opacity observations, the Director, Tidewater Regional Office shall be notified in writing, within seven days, and visible emissions testing shall be rescheduled within 30 days. Rescheduled testing shall be conducted under the same conditions (as possible) as the initial performance tests. One copy of the test result shall be submitted to the Director, Tidewater Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-80-490, 40 CFR 60.46b and Condition 48 of 05/23/12 PSD permit)

4. **VEE Alternative** - A continuous opacity monitoring system may be used to satisfy the visible emission evaluation requirement in lieu of 40 CFR, Part 60, Appendix A, Method 9. The reported test data shall include averages of all six minute continuous periods within the test period and within the duration of any mass emission performance tests being conducted. It is the responsibility of the permittee to demonstrate that the monitoring system has met the requirements of the applicable performance evaluation, that the monitoring system has been properly maintained and operated, and that the resulting data has not been altered in any way. If monitoring system data indicates compliance for a period during which Method 9 data indicates non-compliance, the Method 9 data shall be used to determine compliance with the visible emission limit.
(9 VAC 5-80-490, 40 CFR 60.46b and Condition 49 of 05/23/12 PSD permit)

5. **Emission Testing** - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.
(9 VAC 5-80-490)

I. Reporting

1. **Fuel Quality Reports – Distillate Oil** - The permittee shall submit fuel quality reports to the Director, Tidewater Regional Office within 30 days after the end of each calendar quarter. If no shipments of distillate oil were received during the calendar quarter, the quarterly report shall consist of the dates included in the calendar quarter and a statement that no oil was received during the calendar quarter. If distillate oil was received during the calendar quarter, the reports shall include:

   a. The dates included in the calendar quarter;

   b. A copy of all fuel supplier certifications for all shipments of distillate oil received during the calendar quarter or a quarterly summary from each fuel supplier that includes the information specified in Condition III.A.4 for each shipment of distillate oil; and

   c. A signed statement from the owner or operator of the facility that the fuel supplier certifications or summaries of fuel supplier certifications represent all of the distillate oil burned or received at the facility.

   (9 VAC 5-80-490, 9 VAC 5-50-50, 9 VAC 5-50-410 and Condition 33 of 05/23/12 PSD permit)

2. **Excess Emission Reports** - The permittee shall submit written reports to the Tidewater Regional Office of excess emissions from the primary boilers monitored by the CO continuous monitoring system on a quarterly basis, postmarked no later than the 30th day following the end of the calendar quarter. These reports shall include, but are not limited to the following information:

   a. The magnitude of excess emissions, any conversion factors used in the calculation of excess emissions, and the date and time of commencement and completion of each period of excess emissions;

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the process, the nature and cause of the malfunction (if known), the corrective action taken or preventative measures adopted;

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and

   d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in that report.

   These reports shall be available for inspection by the DEQ and shall be current for the most recent five years. (9 VAC 5-80-490)

3. **Compliance Assurance Monitoring (CAM) Reporting** - The permittee shall submit CAM reports as part of the Title V semi-annual monitoring reports required by General Condition C.3 of this permit to the Director, Tidewater Regional Office. Such reports shall include at a minimum:

   a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

   b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

   c. A description of the actions taken to implement a quality improvement plan (QIP) during the reporting period as specified in §64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

   (9 VAC 5-80-490 F and 40 CFR 64.9(a))

IV. Fuel Burning Equipment Requirements – (006, 007, 008 and 009)

A. Limitations

1. **Fuel** - The approved fuels are listed in the table below. A change in the fuel may require a permit to modify and operate.

Reference No.	Equipment Description	Fuel Type(s)
006	Auxiliary Generator	Distillate Oil
007	Emergency Feedwater Pump	Distillate Oil
008	Firewater Pump Engine	Distillate Oil
009	Portable Air Compressor Engine	Distillate Oil

(9 VAC 5-80-490, 9 VAC 5-80-1180 and Condition 25 of 05/23/12 PSD permit)

2. **Operating Hours** - Hourly operating limits for fuel burning equipment are listed in the table below.

Reference No.	Equipment Description	Limit (hr/yr)
006	Auxiliary Generator	336
007	Emergency Feedwater Pump	116
008	Firewater Pump Engine	116
009	Portable Air Compressor Engine	220

These annual limits are calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-490, 9 VAC 5-80-1180 and Condition 30 of 05/23/12 PSD permit)

3. **Fuel** - The distillate oil shall meet the specifications below:

Reference No.	Equipment Description	Fuel	Maximum % Sulfur (by weight, per shipment)	ASTM method
006	Auxiliary Generator	Distillate Oil	0.3	D396 (for numbers 1 or 2 fuel oil)
007	Emergency Feedwater Pump	Distillate Oil	0.3	D396 (for numbers 1 or 2 fuel oil)
008	Firewater Pump Engine	Distillate Oil	0.3	D396 (for numbers 1 or 2 fuel oil)
009	Air Compressor Engine	Distillate Oil	0.3	D396 (for numbers 1 or 2 fuel oil)

(9 VAC 5-80-490, 9 VAC 5-80-1180, 9 VAC 5-50-260 and Condition 32 of 05/23/12 PSD permit)

4. **Fuel Certification** - The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil. Each fuel supplier certification shall include the following:

   a. The name of the fuel supplier;

   b. The date on which the distillate oil was received;

   c. The quantity of distillate oil delivered in the shipment;

   d. A statement that the distillate oil complies with the American Society for Testing and Materials specifications (ASTM D396) for numbers 1 or 2 fuel oil; and

   e. A statement that the sulfur content of the distillate oil is less than or equal to 0.3 percent by weight per shipment.

   Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by DEQ may be used to determine compliance with the fuel specifications stipulated in Condition IV.A.3. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits.
   (9 VAC 5-80-490 B & C, 9 VAC 5-50-410 and Condition 33 of 05/23/12 PSD permit)

5. **Process Emission Limits** - Emissions from the operation of the portable auxiliary diesel generator (006) shall not exceed the limits specified below:

Pollutant	Lbs/hr	Tons/yr
Nitrogen Oxide (as NO_2)	6.2	1.0

   These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. The permittee shall calculate annual NO_x emissions monthly as the sum of each consecutive 12-month period using monthly hours of operation and pollutant-specific AP-42 emission factors (F-factors or AP-42) or other appropriate unit-specific factor (manufacturer specifications). In lieu of such calculations, the permittee may elect to make a one-time demonstration of the correlation between hours of operation of the unit and annual emissions. In such case, compliance with the annual hours of operation limitations for Unit Ref. No. 006 shall be deemed sufficient to demonstrate compliance with the annual NO_x limitation set forth in the table above. The permittee shall make a one-time demonstration of maximum hourly NO_x emissions from the auxiliary diesel generator using manufacturer specifications for maximum heat input (or power output) and appropriate AP-42 emission factors or manufacturer test data. The permittee shall maintain a record of this one-time demonstration of maximum hourly NO_x emissions on-site for the life of the unit.
   *Annual emissions of NO_x shall be calculated monthly as the sum of each consecutive 12-month period.
   (9 VAC 5-80-490 B & C, 9 VAC 5-50-280, 9 VAC 5-80-1180, 9 VAC 5-50-260 and Condition 40 of 05/23/12 PSD permit)

6. **Visible Emission Limit** - Visible emissions from the portable auxiliary diesel generator (006) shall not exceed ten (10) percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed twenty (20) percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during start-up, shutdown or malfunction. Any Method 9 testing shall be performed at the request of DEQ.
   (9 VAC 5-80-1180 and Condition 42 of 05/23/12 PSD permit)

B. Recordkeeping

1. **Records** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:

   a. Annual hours of operation for each of the auxiliary diesel generator (006), diesel feedwater pump (007), diesel firewater pump engine (008) and diesel air compressor engine (009), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months;

   b. All fuel supplier certifications. Vendor receipts containing the required information pertaining to low sulfur oil shall be considered certifications for the purposes of this permit;

   c. A one-time calculation of maximum hourly NO_x emissions from the portable auxiliary diesel generator (006) to be maintained on-site and readily accessible for inspection for the life of the unit;

   d. Calculations of annual NO_x emissions from the portable auxiliary diesel generator (006) calculated monthly as the sum of each consecutive 12-month period. In lieu of monthly calculations, the permittee may elect to maintain records of a one-time demonstration of maximum annual emissions based on maximum annual operating hours. Such records shall be maintained on-site and be readily accessible for inspection for the life of the unit; and

   e. Any visible emissions observations/evaluations.

   These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

   (9 VAC 5-50-50, 9 VAC 5-60-50, 9 VAC 5-80-490 and Condition 45 of 05/23/12 PSD permit)

C. Testing

1. **Visible Emissions Evaluations** - Visible emissions from the stack of the portable auxiliary diesel generator (006) shall not exceed 10 percent opacity as determined by EPA Reference Method 9 (reference 40 CFR 60, Appendix A). In lieu of Method 9, opacity shall be demonstrated by monthly visible emission evaluations of the diesel generator stack outlet. An evaluation consisting of no visible emissions shall indicate compliance with the opacity standard. The permittee shall log each evaluation in a logbook to be maintained on-site for the most recent five (5) years.
   (9 VAC 5-50-20)

2. **Additional Testing** - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.
   (9 VAC 5-80-490)

V. Biomass, Ash & Lime Handling Requirements – (010 - 017 and 101 - 104)

A. Limitations

1. **Emission Controls** - Particulate matter emissions from the biomass storage silo, lime storage silo and ash silo (010, 017 and 015) shall be controlled by bag filters. The bag filters shall be provided with adequate access for inspection and shall be in operation when the biomass storage silo, lime storage silo and ash silo are operating.
(9 VAC 5-80-490 and Condition 6 of 05/23/12 PSD permit)

2. **Emission Controls** – Lime slaker emissions shall be controlled by a dust suppression aspirator and water jet spray system (venturi scrubber). The aspirator vapor discharge shall be piped to the slurry tank for complete enclosure of all dust particles produced during the slaking process.
(9 VAC 5-80-490 and Condition 9 of 05/23/12 PSD permit)

3. **Fugitive Emission Controls** – Fugitive dust emissions from the truck tippers (101A and 101B) shall be controlled by enclosures and covers.
(9 VAC 5-80-490 and Condition 10 of 05/23/12 PSD permit)

4. **Fugitive Emission Controls** – Fugitive dust emissions from the biomass screening and hogging operations shall be controlled by total enclosures.
(9 VAC 5-80-490 and Condition 11 of 05/23/12 PSD permit)

5. **Fugitive Emission Controls** – Fugitive dust emissions from the biomass conveyors and transfer points shall be controlled by enclosed conveyors and chutes.
(9 VAC 5-80-490 and Condition 12 of 05/23/12 PSD permit)

6. **Fugitive Emission Controls** – Discharge from the ash and flue gas desulfurization product storage silo shall be mixed with water to minimize fugitive dust emissions as necessary.
(9 VAC 5-80-490 and Condition 13 of 05/23/12 PSD permit)

7. **Fugitive Emission Controls** – Fugitive dust emissions from the furnace bottom ash drag shall be controlled by quenching ash with water. Fugitive dust emissions from the boiler ash collection drag and mechanical collector ash collection drag shall be saturated by water spray nozzles.
(9 VAC 5-80-490 and Condition 14 of 05/23/12 PSD permit)

8. **Fugitive Dust and Fugitive Emission Controls** – Fugitive dust and fugitive emission controls shall include the following, or equivalent, as approved by DEQ:

   a. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; paving of roadways, and maintenance of roadways in a clean condition;

   b. Open equipment for conveying or transporting materials likely to create objectionable air pollution when airborne shall be covered, or treated in an equally effective manner at all times when in motion;

   c. Prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion;

   d. Dust from material handling, and load-outs, shall be controlled by wet suppression or equivalent. The wet suppression spray systems shall be operated at optimum design; and

   e. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. These measures shall include paving the entrance/access road to the facility. Dirt, product, or raw material spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.

(9 VAC 5-80-490 and Condition 15 of 05/23/12 PSD permit)

9. **Emission Limits** - Fugitive dust emissions from the operation of the lime storage and handling systems shall not exceed the limits specified below:

Pollutant	Lbs/hr	Tons/yr
PM_{10} - total	0.20	0.5
PM - total	0.27	0.62

These emissions are derived from the estimated overall emission contribution from operating limits and are included for emission inventory purposes. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits.
(9 VAC 5-80-490, 9 VAC 5-80-1180, 9 VAC 5-50-260 and Condition 38 of 05/23/12 PSD permit)

10. **Emission Limits** – Particulate emissions from the operation of the biomass handling system and storage pile shall not exceed the limitations specified below:

Pollutant	Tons/yr
$PM_{2.5}$ – total	0.1
PM_{10} – total	0.6
PM – total	1.5

These emissions are derived from the estimated overall emission contribution from operating limits and are included for emission inventory purposes. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits.
(9 VAC 5-80-490, 9 VAC 5-80-1180, 9 VAC 5-50-260 and Condition 39 of 05/23/12 PSD permit)

11. **Visible Emission Limit** – Visible emissions from the biomass handling system shall not exceed ten (10) percent opacity as determined using the methods specified in 9 VAC 5-50-20 A.3.
(9 VAC 5-80-490 and Condition 43 of 05/23/12 PSD permit)

12. **Visible Emission Limit** - Visible emissions from any fabric filter vent or exhaust duct shall not exceed five (5) percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-80-490 and Condition 44 of 05/23/12 PSD permit)

B. Monitoring

1. **Visible Emissions Monitoring** – Visible emission observations from the fabric filter exhaust stacks and all fugitive emission points shall be conducted at least once a week. If visible emissions are observed, the permittee shall:

   a. Take timely corrective action such that the equipment resumes operation with no visible emissions; or

   b. Perform a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from any fabric filter is less than five (5) percent opacity or any fugitive emission point is less than ten (10) percent opacity. The VEE shall be conducted for a minimum of six (6) minutes. If any of the 15-second observations exceeds the appropriate opacity value listed in Conditions V.A.13 or V.A.14 , the VEE shall be conducted for a total of sixty (60) minutes. If compliance is not demonstrated by the VEE, timely corrective action shall be taken such that the equipment resumes operation with visible emissions of less than the allowable limits listed in Conditions V.A.13 or V.A.14.

A record of the date, time, observer, cause and corrective measures taken shall be made. If no visible emissions were observed, a record of the date, time and observer shall be made. These records shall be maintained on site by the permittee for the most recent 5-year period.
(9 VAC 5-80-490 E)

C. Recordkeeping

1. **Records** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. These records shall include, but are not limited to:

   a. The results of the weekly opacity observations of all emissions points associated with these processes, along with any corrective actions.

   These records shall be available on site for inspection by DEQ and shall be current for the most recent five (5) years.
   (9 VAC 5-80-490, 9 VAC 5-50-50 and Condition 45 of 05/23/12 PSD permit)

D. Testing

1. **Testing** - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate methods in accordance with procedures approved by the DEQ.
   (9 VAC 5-80-490)

VI. Facility Wide Conditions

A. Requirements – Facility Wide

1. **Steam Agreement** – Any host steam agreement, excluding financial terms, shall be made available on site for review by DEQ upon request.
(9 VAC 5-80-490 and Condition 23 of 05/23/12 PSD permit)

2. **Initial Notifications** - The permittee shall furnish written notification to the Director, Tidewater Regional Office of:

   a. The actual date on which modification of the electricity generating facility commenced within 30 days after such date;

   b. The actual date on which start-up operations of the biomass handling equipment commence within 30 days of such date;

   c. The actual start-up date of the electricity generating facility within 15 days after such date;

   d. The anticipated date of performance tests postmarked at least 30 days prior to such date;

   e. The anticipated date of continuous monitoring system performance evaluations postmarked not less than 30 days prior to such date; and

   f. The intention to use continuous opacity monitoring system data results to demonstrate compliance with the applicable visible emission limit during a performance test in lieu of Reference Method 9 (reference 40 CFR, Part 60, Appendix A), postmarked not less than 30 days prior to the date of the performance test.

   Copies of the written notification referenced in items a, c and e above are to be sent to:
   Associate Director
   Office of Enforcement and Compliance Assistance (3AP20)
   U.S. Environmental Protection Agency
   Region III
   1650 Arch Street
   Philadelphia, PA 19103-2029
   (9 VAC 5-80-490 and Condition 50 of 05/23/12 PSD permit)

VII. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Reference No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
ISU-1	Turbine Lube Oil Reservoir	5-80-720 B.1	VOC	N/A
ISU-2	Water Based (non-solvent) Parts Washer	5-80-720 B.1	VOC	N/A
ISU-3	Used Oil Tank	5-80-720 C.2.a	VOC	500 gallons
ISU-4	Oil/Water Separator (Oil Sump)	5-80-720 C.2.a	VOC	280 gallons
ISU-5	Distillate Oil Storage Tank	5-80-720 C.2.a	VOC	42,000 gallons

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

VIII. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
40 CFR 60 Subpart D	Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971	No emissions sources at this facility are subject to these NSPS requirements.
40 CFR 60 Subpart Da	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	
40 CFR 60 Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and prior to May 19, 1978	
40 CFR 60 Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and prior to July 23, 1984	
40 CFR 60 Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	
40 CFR 60 Subpart Y	Standards of Performance for Coal Preparation and Processing Plants	

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.
(9 VAC 5-80-140)

IX. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
(9 VAC 5-80-490 N)

B. Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-430, the right of the facility to operate shall be terminated upon permit expiration.

1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration;

2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 3, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-510;

3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-430 for a renewal permit, except in compliance with a permit issued under Article 3, Part II of 9 VAC 5 Chapter 80;

4. If an applicant submits a timely and complete application under section 9 VAC 5-80-430 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-500, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied; and

5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-430 shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-430 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

   (9 VAC 5-80-430 B, C, and F, 9 VAC 5-80-490 D and 9 VAC 5-80-530 B)

C. Recordkeeping and Reporting

1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:

   a. The date, place as defined in the permit, and time of sampling or measurements;

   b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of such analyses; and

f. The operating conditions existing at the time of sampling or measurement.

(9 VAC 5-80-490 F)

2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
(9 VAC 5-80-490 F)

3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-430 G, and shall include:

a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31;

b. All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:

(i) Exceedance of emissions limitations or operational restrictions;

(ii) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,

(iii) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9 VAC 5-80-490 F)

D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-430 G, and shall include:

1. The time period included in the certification. The time period to be addressed is January 1 to December 31;

2. The identification of each term or condition of the permit that is the basis of the certification;

3. The compliance status;

4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance;

5. Consistent with subsection 9 VAC 5-80-490 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period;

6. Such other facts as the permit may require to determine the compliance status of the source; and

7. One copy of the annual compliance certification shall be submitted to EPA in electronic format only. The certification document should be sent to the following electronic mailing address:

   R3_APD_Permits@epa.gov

(9 VAC 5-80-490 K.5)

E. Permit Deviation Reporting

The permittee shall notify the Director, Tidewater Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition IX.C.3 of this permit.

(9 VAC 5-80-490 F.2 and 9 VAC 5-80-250)

F. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, Tidewater Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Tidewater Regional Office.

(9 VAC 5-20-180 C)

G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

(9 VAC 5-80-490 G.1)

H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.

(9 VAC 5-80-490 G.2)

I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-490 G.3)

J. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1790, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.

(9 VAC 5-80-490 G & L, 9 VAC 5-80-550 and 9 VAC 5-80-660)

K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege.

(9 VAC 5-80-490 G.5)

L. Duty to Submit Information

1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
(9 VAC 5-80-490 G.6)

2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-430 G.
(9 VAC 5-80-490 K.1)

M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-360 through 9 VAC 5-80-700 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.

(9 VAC 5-80-490 H and 9 VAC 5-80-340 C)

N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;

2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;

3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or similar operations;

4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and

5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-20 E, 9 VAC 5-50-90 and 9 VAC 5-50-50)

O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, and soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-50-20 E and 9 VAC 5-40-20 E)

P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-500 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 3.

(9 VAC 5-80-490 J)

Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit;

2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit;

3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and

4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-490 K.2)

R. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-430 F.

1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements; and

3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-490 D.

(9 VAC 5-80-490 L)

S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.
(9 VAC 5-80-510 E)

T. Transfer of Permits

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
(9 VAC 5-80-520)

2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-560.
(9 VAC 5-80-520)

3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-560.
(9 VAC 5-80-520)

U. Malfunction as an Affirmative Defense

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.

2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:

   a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction;

   b. The permitted facility was at the time being properly operated;

   c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

   d. The permittee notified the Board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-490 F.2.b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.

3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.

4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-650)

V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 3. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.

(9 VAC 5-80-490 G & L, 9 VAC 5-80-640 and 9 VAC 5-80-660)

W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9 VAC 5-80-430 E)

X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.

(40 CFR Part 82, Subparts A-F)

Y. Asbestos Requirements

The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).

(9 VAC 5-60-70 and 9 VAC 5-80-490 A)

Z. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.

(40 CFR Part 68)

AA. Changes to Permits for Emissions Trading

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

(9 VAC 5-80-490 I)

BB. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

1. All terms and conditions required under 9 VAC 5-80-490, except subsection N, shall be included to determine compliance;

2. The permit shield described in 9 VAC 5-80-500 shall extend to all terms and conditions that allow such increases and decreases in emissions; and

3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-360 through 9 VAC 5-80-700.

(9 VAC 5-80-490 I)

X. Title IV (Phase II Acid Rain) Permit Allowances and Requirements

The attached Phase II permit is incorporated into this permit by reference (Attachment A), including the attached NOx Compliance Plan and attached NOx Averaging Plan. The owners and operators of the source shall comply with the standard requirements and special provisions set forth in the application.

(9 VAC 5-80-440 and 9 VAC 5-80-490 A.4.a & c, B, C, E, F, M, O and P)

XI. Clean Air Interstate Rule (CAIR) Requirements

The permittee shall comply with all applicable CAIR requirements (9 VAC 5-140-1010 *et seq.*, 9 VAC 5-140-2010 *et seq.*, 9 VAC 5-140-3010 *et seq.* and 40 CFR Part 96) by the compliance date in the respective Part of 9 VAC 5 Chapter 140. The CAIR application in Attachment B to this document contains specific conditions and expires upon expiration of this Title V permit.
(9 VAC 5-80-490, 40 CFR Part 96, and 9 VAC 5 Chapter 140)

XII. State-Only Enforceable Requirements

The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-690 concerning review of proposed permits by EPA and draft permits by affected states.

1. Odor (9 VAC 5 Chapter 40, Article 2)

2. State toxics rule (9 VAC 5 Chapter 60)

(9 VAC 5-80-490 N and 9 VAC 5-80-700)

Virginia Electric and Power Company
Dominion Generation - Southampton Power Station
Permit Number: TRO-61093
August 29, 2013

ATTACHMENT A
(Phase II Acid Rain)

United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258
Approval expires 11/30/2012

Acid Rain Permit Application

For more information, see instructions and 40 CFR 72.30 and 72.31.

This submission is: ~ new ~ revised X for Acid Rain permit renewal

RECEIVED – DEQ
JUL 01 2010
Tidewater Regional Office

STEP 1

Identify the facility name, State, and plant (ORIS) code.

Southampton Power Station	Virginia	Plant Code: 10774

STEP 2

Enter the unit ID# for every affected unit at the affected source in column "a."

a	b
Unit ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)
1	Yes
2	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes

Permit Requirements

STEP 3

Read the standard requirements.

(1) The designated representative of each affected source and each affected unit at the source shall:

(i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and

(ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;

(2) The owners and operators of each affected source and each affected unit at the source shall:

(i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and

(ii) Have an Acid Rain Permit.

Monitoring Requirements

(1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.

(2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.

(3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

(1) The owners and operators of each source and each affected unit at the source shall:

(i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and

(ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.

(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.

(3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:

(i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or

(ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

Sulfur Dioxide Requirements, Cont'd.

STEP 3, Cont'd.

(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

(1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
(2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
(i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
(ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

(1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
(i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;

Recordkeeping and Reporting Requirements, Cont'd.

STEP 3, Cont'd.

(ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
(iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

(2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
(4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
(5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
(6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
(7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:
(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating

Southampton Power Station

Effect on Other Authorities, Cont'd.

to applicable National Ambient Air Quality Standards or State Implementation Plans;

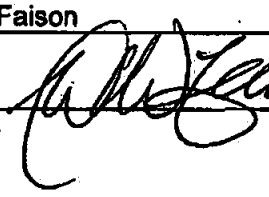
STEP 3, Cont'd.

(2) Limiting the number of allowances a source can hold; *provided,* that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;
(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

Certification

STEP 4
Read the certification statement, sign, and date.

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name: David Faison	
Signature 	Date 6/15/10

ATTACHMENT B
(Clean Air Interstate Rule - CAIR)

CAIR Permit Application
(for sources covered under a CAIR SIP)

For more information, refer to 40 CFR 96.121, 96.122, 96.221, 96.222, 96.321, and 96.322

This submission is: ☒ New ☐ Revised

STEP 1
Identify the source by plant name, State, and ORIS or facility code

Plant Name Dominion – Southampton Power Station State VA ORIS/Facility Code 10774

STEP 2
Enter the unit ID# for each CAIR unit and indicate to which CAIR programs each unit is subject (by placing an "X" in the column)

Unit ID#	NO_X Annual	SO_2	NO_X Ozone Season
1	X	X	X
2	X	X	X

STEP 3
Read the standard requirements and the certification, enter the name of the CAIR designated representative, and sign and date

Standard Requirements

(a) Permit Requirements.

(1) The CAIR designated representative of each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) required to have a title V operating permit and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) required to have a title V operating permit at the source shall:

(i) Submit to the permitting authority a complete CAIR permit application under §96.122, §96.222, and §96.322 (as applicable) in accordance with the deadlines specified in §96.121, §96.221, and §96.321 (as applicable); and

(ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review a CAIR permit application and issue or deny a CAIR permit.

(2) The owners and operators of each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) required to have a title V operating permit and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) required to have a title V operating permit at the source shall have a CAIR permit issued by the permitting authority under subpart CC, CCC, and CCCC (as applicable) of 40 CFR part 96 for the source and operate the source and the unit in compliance with such CAIR permit.

(3) Except as provided in subpart II, III, and IIII (as applicable) of 40 CFR part 96, the owners and operators of a CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) that is not otherwise required to have a title V operating permit and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) that is not otherwise required to have a title V operating permit are not required to submit a CAIR permit application, and to have a CAIR permit, under subpart CC, CCC, and CCCC (as applicable) of 40 CFR part 96 for such CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) and such CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable).

Plant Name (from Step 1) **Dominion – Southampton Power Station**

STEP 3, continued

(b) Monitoring, reporting, and recordkeeping requirements.

(1) The owners and operators, and the CAIR designated representative, of each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) at the source shall comply with the monitoring, reporting, and recordkeeping requirements of subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96.

(2) The emissions measurements recorded and reported in accordance with subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96 shall be used to determine compliance by each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) with the CAIR NO_X emissions limitation, CAIR SO_2 emissions limitation, and CAIR NO_X Ozone Season emissions limitation (as applicable) under paragraph (c) of §96.106, §96.206, and §96.306 (as applicable).

(c) Nitrogen oxides emissions requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_X source and each CAIR NO_X unit at the source shall hold, in the source's compliance account, CAIR NO_X allowances available for compliance deductions for the control period under §96.154(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_X units at the source, as determined in accordance with subpart HH of 40 CFR part 96.

(2) A CAIR NO_X unit shall be subject to the requirements under paragraph (c)(1) of §96.106 for the control period starting on the later of January 1, 2009 or the deadline for meeting the unit's monitor certification requirements under §96.170(b)(1), (2), or (5) and for each control period thereafter.

(3) A CAIR NO_X allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of §96.106, for a control period in a calendar year before the year for which the CAIR NO_X allowance was allocated.

(4) CAIR NO_X allowances shall be held in, deducted from, or transferred into or among CAIR NO_X Allowance Tracking System accounts in accordance with subparts FF, GG, and II of 40 CFR part 96.

(5) A CAIR NO_X allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_X Annual Trading Program. No provision of the CAIR NO_X Annual Trading Program, the CAIR permit application, the CAIR permit, or an exemption under §96.105 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.

(6) A CAIR NO_X allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subpart EE, FF, GG, or II of 40 CFR part 96, every allocation, transfer, or deduction of a CAIR NO_X allowance to or from a CAIR NO_X source's compliance account is incorporated automatically in any CAIR permit of the source that includes the CAIR NO_X unit.

Sulfur dioxide emission requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR SO_2 source and each CAIR SO_2 unit at the source shall hold, in the source's compliance account, a tonnage equivalent of CAIR SO_2 allowances available for compliance deductions for the control period under §96.254(a) and (b) not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO_2 units at the source, as determined in accordance with subpart HHH of 40 CFR part 96.

(2) A CAIR SO_2 unit shall be subject to the requirements under paragraph (c)(1) of §96.206 for the control period starting on the later of January 1, 2010 or the deadline for meeting the unit's monitor certification requirements under §96.270(b)(1), (2), or (5) and for each control period thereafter.

(3) A CAIR SO_2 allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of §96.206, for a control period in a calendar year before the year for which the CAIR SO_2 allowance was allocated.

(4) CAIR SO_2 allowances shall be held in, deducted from, or transferred into or among CAIR SO_2 Allowance Tracking System accounts in accordance with subparts FFF, GGG, and III of 40 CFR part 96.

(5) A CAIR SO_2 allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO_2 Trading Program. No provision of the CAIR SO_2 Trading Program, the CAIR permit application, the CAIR permit, or an exemption under §96.205 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.

(6) A CAIR SO_2 allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subpart FFF, GGG, or III of 40 CFR part 96, every allocation, transfer, or deduction of a CAIR SO_2 allowance to or from a CAIR SO_2 source's compliance account is incorporated automatically in any CAIR permit of the source that includes the CAIR SO_2 unit.

Nitrogen oxides ozone season emissions requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO_X Ozone Season allowances available for compliance deductions for the control period under §96.354(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_X Ozone Season units at the source, as determined in accordance with subpart HHHH of 40 CFR part 96.

(2) A CAIR NO_X Ozone Season unit shall be subject to the requirements under paragraph (c)(1) of §96.306 for the control period starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under §96.370(b)(1), (2), (3) or (7) and for each control period thereafter.

(3) A CAIR NO_X Ozone Season allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of §96.306, for a control period in a calendar year before the year for which the CAIR NO_X Ozone Season allowance was allocated.

(4) CAIR NO_X Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO_X Ozone Season Allowance Tracking System accounts in accordance with subparts FFFF, GGGG, and IIII of 40 CFR part 96.

(5) A CAIR NO_X allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_X Ozone Season Trading Program. No provision of the CAIR NO_X Ozone Season Trading Program, the CAIR permit application, the CAIR permit, or an exemption under §96.305 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.

(6) A CAIR NO_X allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subpart EEEE, FFFF, GGGG, or IIII of 40 CFR part 96, every allocation, transfer, or deduction of a CAIR NO_X Ozone Season allowance to or from a CAIR NO_X Ozone Season source's compliance account is incorporated automatically in any CAIR permit of the source.

Plant Name (from Step 1) **Dominion – Southampton Power Station**

STEP 3, continued

(d) Excess emissions requirements.

If a CAIR NO_X source emits nitrogen oxides during any control period in excess of the CAIR NO_X emissions limitation, then:

(1) The owners and operators of the source and each CAIR NO_X unit at the source shall surrender the CAIR NO_X allowances required for deduction under §96.154(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law; and

(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart, the Clean Air Act, and applicable State law.

If a CAIR SO_2 source emits sulfur dioxide during any control period in excess of the CAIR SO_2 emissions limitation, then:

(1) The owners and operators of the source and each CAIR SO_2 unit at the source shall surrender the CAIR SO_2 allowances required for deduction under §96.254(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law; and

(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart, the Clean Air Act, and applicable State law.

If a CAIR NO_X Ozone Season source emits nitrogen oxides during any control period in excess of the CAIR NO_X Ozone Season emissions limitation, then:

(1) The owners and operators of the source and each CAIR NO_X Ozone Season unit at the source shall surrender the CAIR NO_X Ozone Season allowances required for deduction under §96.354(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law; and

(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart, the Clean Air Act, and applicable State law.

(e) Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the permitting authority or the Administrator.

(i) The certificate of representation under §96.113, §96.213, and §96.313 (as applicable) for the CAIR designated representative for the source and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under §96.113, §96.213, and §96.313 (as applicable) changing the CAIR designated representative.

(ii) All emissions monitoring information, in accordance with subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96, provided that to the extent that subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96 provides for a 3-year period for recordkeeping, the 3-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_X Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_X Ozone Season Trading Program (as applicable).

(iv) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_X Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_X Ozone Season Trading Program (as applicable) or to demonstrate compliance with the requirements of the CAIR NO_X Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_X Ozone Season Trading Program (as applicable).

(2) The CAIR designated representative of a CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) at the source shall submit the reports required under the CAIR NO_X Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_X Ozone Season Trading Program (as applicable) including those under subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96.

(f) Liability.

(1) Each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) and each NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) shall meet the requirements of the CAIR NO_X Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_X Ozone Season Trading Program (as applicable).

(2) Any provision of the CAIR NO_X Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_X Ozone Season Trading Program (as applicable) that applies to a CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) or the CAIR designated representative of a CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) shall also apply to the owners and operators of such source and of the CAIR NO_X units, CAIR SO_2 units, and CAIR NO_X Ozone Season units (as applicable) at the source.

(3) Any provision of the CAIR NO_X Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_X Ozone Season Trading Program (as applicable) that applies to a CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) or the CAIR designated representative of a CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) shall also apply to the owners and operators of such unit.

Plant Name (from Step 1) **Dominion – Southampton Power Station**

STEP 3, continued

(g) Effect on Other Authorities.

No provision of the CAIR NO_X Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_X Ozone Season Trading Program (as applicable), a CAIR permit application, a CAIR permit, or an exemption under § 96.105, §96.205, and §96.305 (as applicable) shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) or CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

Certification

I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name J. David Rives	
Signature J. David Rives	Date 06-21-07

ATTACHMENT C

(Source Testing Report Format)

SOURCE TESTING REPORT FORMAT

Report Cover
- Plant name and location
- Units tested at source (indicate Ref. No. used by source in permit or registration)
- Test Dates
- Tester; name, address and report date

Certification
- Signed by team leader/certified observer (include certification date)
- Signed by responsible company official
- *Signed by reviewer

Copy of approved test protocol

Summary
- Reason for testing
- Test dates
- Identification of unit tested & the maximum rated capacity
- *For each emission unit, a table showing:
  - Operating rate
  - Test Methods
  - Pollutants tested
  - Test results for each run and the run average
  - Pollutant standard or limit
- Summarized process and control equipment data for each run and the average, as required by the test protocol
- A statement that test was conducted in accordance with the test protocol or identification & discussion of deviations, including the likely impact on results
- Any other important information

Source Operation
- Description of process and control devices
- Process and control equipment flow diagram
- Sampling port location and dimensioned cross section. Attached protocol includes: sketch of stack (elevation view) showing sampling port locations, upstream and downstream flow disturbances and their distances from ports; and a sketch of stack (plan view) showing sampling ports, ducts entering the stack and stack diameter or dimensions

Test Results
- Detailed test results for each run
- *Sample calculations
- *Description of collected samples, to include audits when applicable

Appendix
- *Raw production data
- *Raw field data
- *Laboratory reports
- *Chain of custody records for lab samples
- *Calibration procedures and results
- Project participants and titles
- Observers' names (industry and agency)
- Related correspondence
- Standard procedures

* Not applicable to visible emission evaluations